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APPLICATION NUMBER 238	06/11/96 FILING DATE	LUDWIG	FIRST NAMED APPLICANT	VCOR-001/061	ATTORNEY DOCKET NO.
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DINH D EXAMINER	
2756 ART UNIT	PAPER NUMBER

12/12/97

DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**OFFICE ACTION SUMMARY**

☒ Responsive to communication(s) filed on 8-15-97, 9-29-97

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

- ☒ Claim(s) 2-47 is/are pending in the application.  
Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
☐ Claim(s) \_\_\_\_\_ is/are allowed.  
☒ Claim(s) 2-47 is/are rejected.  
☐ Claim(s) \_\_\_\_\_ is/are objected to.  
☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.  
☐ The specification is objected to by the Examiner.  
☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.  
☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_  
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- ☒ Notice of Reference Cited, PTO-892  
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_  
☐ Interview Summary, PTO-413  
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948  
☒ Notice of Informal Patent Application, PTO-152

**Part III DETAILED ACTION**

Applicant's arguments been considered but are moot in view of the new ground(s) of rejection.

The numbering of claims is not accordance with 37 CFR 1.126. The original numbering of the claims must be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When claims are added, except when presented in accordance with 37 CFR 1.121(b), they must be renumbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 50-64 have been renumbered to 44-47 respectively.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

**Claims 2-10, 25, and 12-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Etherphone system as**

disclosed by Rangan "Software Architecture for Integration of Video Services in the Etherphone System" and Vin "Multimedia conferencing in the Etherphone Environment", and further in view of the UNIX operating system 4<sup>th</sup> Berkeley Distribution 1991 as described in the Man Pages for: login, utmp, talk, and who (available on Internet at <http://www.de.freebsd.org>).

As per claim 2, Rangan disclose the Etherphone is a conferencing system comprising:

workstations having audio and video reproduction capabilities [p.1396 fig.1];

AV path for carrying AV signals [fig.1];

AV conference manager [p.1397 Macaw];

a participant locator [apparent from p.1398 "if a participant moves to new location, Macaw reroutes ... to new location"].

Rangan does not specifically disclose the system is configured to associated a participant with only each workstation at which the participant logs in. Rangan discloses that a connection is establish by a connect command having a participantID parameter [p.1397 col.2 last paragraph]. Rangan does not disclose how the system locates the workstation associated with the participantID.

The Etherphone system's workstations use UNIX. It is well known in the art that UNIX requires a user to login and its keep track of which terminal(s) the user has logged in [see the man

page for 'login' and 'utmp']. It is also known that UNIX as a primitive data conference in the form of a 'talk' command that take a user name as a parameter and sends a talk request to only terminals that the user is currently logged in [see the man page for 'talk' and 'who']. Hence, it is apparent that the Etherphone system would have been configured to associate a participant (ID) with each workstation at which the participant logged-in in order to establish the conference connection. It would have been obvious for one of ordinary skill in the art to associate a participant with only each workstation at which the participant logs in because it would enable the participant to receive/answer the conference call.

As per claim 25, it is rejected under similar rationale as for claim 2 above.

As per claims 3 and 12-13, Rangan and Vin do not specifically disclose a service directory of the workstation audio video capability. Vin discloses the Etherphone system support conferencing using common capabilities or mixed capabilities by determining audio video capabilities of the workstations [p.72 col.3]. Hence, it would have been obvious or one of ordinary skill in the art to have directory for determining audio, video capabilities of the workstation participating in the conference.

As per claim 4, Rangan disclose switches to establish teleconference between participants [p.1396 fig.1 "Matrix switch"]. The number of switches and participant supported would have been a matter of design choice. It would have been obvious for one of ordinary skill in the art to have the appropriate number of switches to support a desired number of participants.

As per claim 5, Rangan does not disclose Wide Area network (WAN) switches. However it is well known in the art to have WAN switches (gateway) for connecting workstations over geographically dispersed locations.

As per claim 6, it is rejected under similar rationale as for claim 3 above.

As per claim 7, it is apparent that the conference manager would choose reproduce devices based on availability.

As per claims 8-9, Rangan discloses user interface art to provide user selecting capability of reproduction devices [p.1397 col.1 last paragraph].

As per claims 10 and 15, the reference does not specifically disclose format conversion. However it is well known in the art to have converter for different AV signal encoding. It would have been well within the level of one of ordinary skill in the art to have converter for converting the AV format.

As per claim 14, Rangan disclose interfacing to external video production device [p.1396 fig.1 Optical disc].

As per claim 16, the Etherphone system has digital data path [Ethernet].

Claims 17, 19-20, 21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Etherphone system as disclosed by Rangan and Vin above and further in view of Champa US patent 5,315,633.

As per claim 17, Rangan and Vin do not disclose codecs and AV switch for routing signal from first to second location via a third location. Champa teaches a teleconferencing system comprising:

an AV path [fig.4 # 45] for carrying AV signals, connecting the first workstation [fig.4] to a second work station [another station as in fig.4] via a third location [control hub fig.5, see col.7 lines 34-40];

first, second codecs [fig.4 #41], and third codecs [fig.5 #76] at said first, second and third locations configured to compress AV signal;

an AV switch [fig.5 switch #57] at the third location operable to route compressed AV signals to other locations without said compressed AV signals being decompressed by said third codec [apparent from col.6 and fig.5 - from fig.5, it is clear that the third codec (76) only code/decode signal for the

link 75. All other signal would pass through the switch untouched by the codec 76].

It would have been obvious for one of ordinary skill in the art to combine Champa teaching with the EtherPhone system because it would have improved the system by enabling conference over wide area network.

As per claim 19 and 20, the frames rate are inherent characteristic of the system. The particular frame rate would have been a matter of design choice depending upon the quality of video playback required.

As per claim 21, it is rejected under similar rationales as for claim 17 above.

**Claims 18, 22-24, 26-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Etherphone system and Champa above, and further in view of IBM Technical Disclosure Bulletin Vol.34, no.7a, Dec. 1991.**

As per claim 18, Champa does not specifically disclose a data conference manager using network protocol to control the video conference. IBM disclosure teaches a data conference manager [Conference server] controlling video conference [tuners, Rfmod, Codec] using data network [LAN]. Hence, It would have been obvious for one of ordinary skill in the art to have data manager

using network protocol to control AV conference because it would have enable integration of data and AV conferences.

As per claim 22, it is rejected under similar rationales as for claim 18 above.

As per claims 23-24 they are rejected under similar rationales as for claims 19-20 above.

As per claims 26, it is rejected under similar rationales as for claims 1+16+18 above.

As per claim 27, it is rejected under similar rationale as for claim 4 above.

As per claim 28, it is well known in the art to have WAN switches (gateway) for connecting workstations over geographically dispersed locations. Champa teaches geographic dispersed switch and AV path over Wide Area Network [fig.5 T1 line 79 and Trans Ocean line 83].

As per claim 29, Rangan teaches Etherphone system having an AV switch [fig.1 Matrix switch] for receiving and routing AV signal;

AV reproduction device with audio/video capabilities. [apparent from fig.1];

a directory of AV reproduction device and its associated capabilities [apparent from p.1397 col.2].



As per claim 30, Vin discloses the Etherphone system having AV conference manager select the AV reproduction device according to capabilities [p.27 col.3].

As per claim 31, Rangan discloses external video producing device [p.1396, fig.1].

As per claim 32, Rangan discloses user interface art to provide user selecting capability of reproduction devices [p.1397 col.1 last paragraph].

As per claim 33, the reference does not specifically disclose supporting different signal format standard. It is well known in the art to have converter for different AV signal encoding. It would have been well within the level of one of ordinary skill in the art to have converter for converting the AV format and support plural signal format standard.

As per claim 34, the Etherphone system has digital data path [Ethernet];

As per claim 35, Rangan discloses managing the video conference by communication over the data path [apparent from p.1397-1398]. The IBM TDB v.34 teaches controlling the video conference by communication transmitted over the data path [p.337 lines 10-17].

As per claim 36, it is rejected under similar rationale for claim 17 above.

As per claims 37-38, the frames rates are inherent characteristic of the system. The particular frame rate would have been a matter of design choice depending upon the quality of video playback required.

As per claims 39, it is rejected under similar rationales as for claims 1+16+18 above.

As per claim 40, Vin discloses the Etherphone system having AV conference manager select the AV reproduction device according to capabilities [p.27 col.3].

As per claim 41, Rangan discloses the Etherphone system having AV reproduction device [fig.1 Optical disk] and selecting reproduction service to the workstation.

As per claim 42, it is apparent that there is an interface between the AV conference manager and the reproduction device.

As per claim 43, the reference does not specifically disclose supporting different signal format standard. It is well known in the art to have converter for different AV signal encoding. It would have been well within the level of one of ordinary skill in the art to have converter for converting the AV format and support plural signal format standard.

As per claim 44, Champa teaches compressing AV signal, receiving AV signal at a third location [switch in fig.5] and

routing to the second location without decompressing at the third location.

As per claim 45, Rangan disclose managing the video conference by communication over the data path [apparent from p.1397-1398]. The IBM TDB v.34 teaches controlling the video conference by communication transmitted over the data path [p.337 lines 10-17].

As per claims 46-47, the frames rates are inherent characteristic of the system. The particular frame rate would have been a matter of design choice depending upon the quality of video playback required.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung Dinh whose telephone number is (703) 305-9655. The examiner can

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Art Unit: 2756

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normally be reached on Monday-Thursday from 7:00 AM - 4:30 PM.  
The examiner can also be reached on alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached at (703) 305-9717.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

**Any response to this action should be mailed to:**


Commissioner of Patents and Trademarks  
Washington, DC 20231

**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

(703) 308-5359 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).



Dung Dinh  
Patent Examiner  
November 13, 1997